

## Foundation Repairs and Basement Drainage

Planning & Development Services | Building Safety Division

[www.lawrenceks.org/pds/building-safety](http://www.lawrenceks.org/pds/building-safety)

### **Code Requirements**

Foundation repairs involving structural alterations of foundation systems are regulated under Chapter 4 of the currently adopted International Residential Code and require a building permit per Lawrence City Code Chapter 5, Section 5-139. This includes adding piers, steel posts, helical piers, I-beams, or ground anchor tie-back systems. In addition to foundation systems, basement drainage systems also require a permit.

#### **5-139 PERMITS REQUIRED**

Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical, or plumbing system, the installation of which is regulated by this Article, or to cause any such work to be done, shall first make application to the Building Official and shall obtain the required permit.

Minor maintenance repairs may be exempt from a permit if they meet the requirements of 5-144 and may include waterproofing, injecting walls with crack filler, or mudjacking. Mudjacking is **a concrete leveling method that pumps mud (slurry) under a building, driveway or other sunken concrete to lift**. The foundation wall is a loadbearing support and alterations to the wall require a building permit.

#### **5-144 REPAIRS**

Application or notice to the Building Official is not required for ordinary repairs to structures, replacement of lamps, or the connection of approved portable electrical equipment to approved, permanently installed receptacles. **Such repairs shall not include the cutting away of any wall, partition, or portion thereof, the removal or cutting of any structural beam or loadbearing support, the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements;** nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring, mechanical, or other work affecting public health, safety, or welfare.

Anytime a pump is installed, a licensed electrical contractor is required to install an approved receptacle in accordance with the manufacturer's installation instructions.

**5-333 The 2018 International Residential Code is hereby amended by adding Section E3703.8**, which reads as follows:

**E3703.8 Sump Pumps.** Sump pumps shall be served by an individual branch circuit. The circuit and its single receptacle outlet shall be in addition to any other outlets required by Section E3901.

A separate electrical permit shall be applied for and inspected prior to the installation of the pump/and or the issuance of the building permit **OR** the licensed electrical contractor shall be listed on the building permit for the pump and the inspection will be conducted once the permit is issued. A pump cannot be connected to an extension cord for power unless specifically listed to be connected with a flexible cord.

### **Plan Submission Requirements**

All residential foundation repair or basement drainage systems will require the following:

- Complete application listing licensed contractors responsible for work performed including general, framing, concrete, electrical, and/or plumbing.

- A pre-engineered foundation repair system with specifications stating compliance with current codes and local amendments (ICC-ES report) must be submitted or provide State of Kansas licensed engineer report stamped and sealed with attached documents for foundation repair system.

A floorplan providing location and details of the basement drainage system and specifications will be required for basement drainage systems.

### ***Fees***

Permit fees are based on the project valuation for the materials and labor costs associated with the project. A permit fee calculator can found on our website at [https://lawrenceks.org/pds/residential\\_permits/#residential-calc](https://lawrenceks.org/pds/residential_permits/#residential-calc) and clicking on the Standard Fee Estimator.

### ***Inspections***

Required inspections for foundation repair or basement drainage system permits may include:

- Footing - piers
- Foundation wall – foundation repair
- Concrete slab – basement drainage system
- Rough-in plumbing – drainage, sump pits
- Rough-in electrical – sump pump
- Framing – I-beams, tie-back systems
- Final building – work completed in accordance with City reviewed plans and smoke/co2 alarms have been upgraded.

The engineer inspection report may be submitted for review and approval in lieu of the City inspection(s). Engineer's inspection report shall be submitted to [buildinginspections@lawrenceks.org](mailto:buildinginspections@lawrenceks.org) for review when work is complete.

The engineer knowledgeable with IRC Sections R314 and R315 sections may perform the inspection on the smoke and carbon monoxide alarms. The location of the smoke and carbon monoxide alarms must be included in the engineer report. A statement the devices were tested to confirm all were interconnected and working properly will be required. As an alternative, coordinate inspection of all smoke and carbon monoxide detectors with city building inspection staff. Inspection staff will accommodate requests for Remote Video Inspection (RVI) in lieu of physical jobsite inspection visits.

### ***Smoke and Carbon Monoxide Alarm Requirements***

Where alterations, repairs, or additions requiring a permit occur, the permit applicant shall be responsible to upgrade the smoke and carbon monoxide alarms throughout the dwelling to new dwelling standards.

Exceptions:

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck.
2. Installation, alteration or repairs of plumbing or mechanical systems.

The alarms shall be interconnected so that the activation of one detector will activate all of the connected devices. Physical interconnection of alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

Combination smoke and carbon monoxide alarms shall be permitted to be used and shall be listed in accordance with UL 2075 and UL 268.